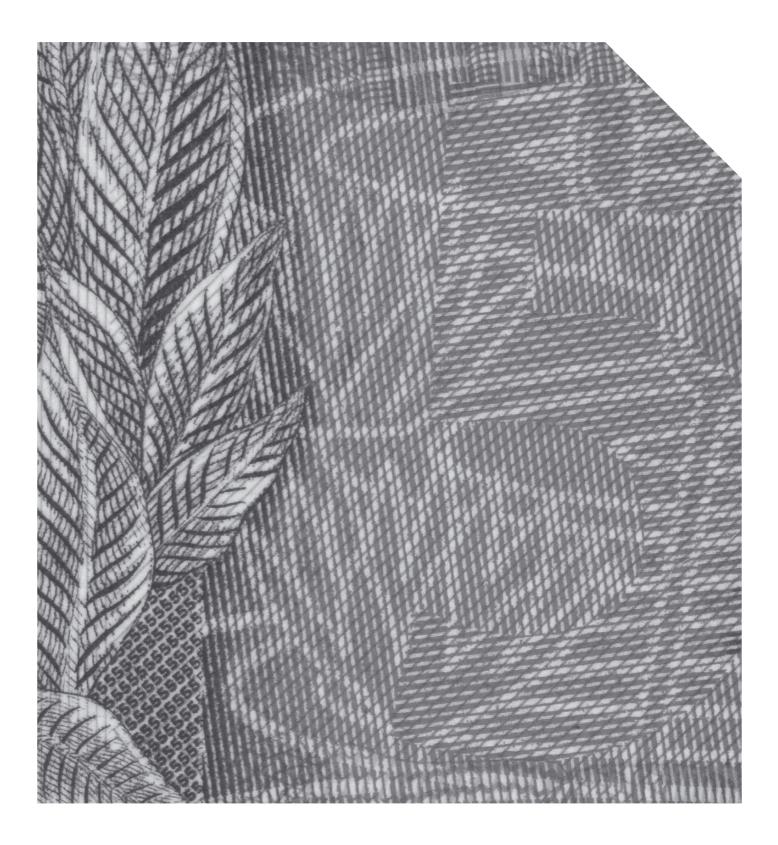


Foreign Direct Investment in Brazil Report 2018

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## Introduction

The Foreign Direct Investment in Brazil Report presents statistical analyses of the direct investment liabilities position in Brazil from 2010 to 2016. Direct investment is the most important external investment category for the Brazilian economy. At the end of 2016, the direct investment liabilities position was approximately equivalent to half of the country's total external liabilities. Direct investment liabilities registered net inflows over the entire series and have been systematically less volatile than portfolio and other investment categories (loans and trade credits, among others).

According to international methodological standards, a direct investment relationship occurs when an investor from one economy holds voting power of 10 percent or more in an enterprise of another economy.<sup>1</sup> Under these conditions, the direct investor effectively participates on the decisions and the strategy of the business, maintaining a stable and long-term interest in the direct investment enterprise (enterprise that receives direct investment).

Direct investment has two components: equity and debt instruments. The equity component refers to nonresidents'<sup>2</sup> ownership of shares of enterprises resident in Brazil; the debt instruments component comprises credit granted to enterprises resident in Brazil by nonresident enterprises belonging to the same economic group.

The major data source for the compilation of direct investment liabilities statistics presented in this report is the Census on Foreign Capital in Brazil (Census). As of 2010, the Quinquennial Census, performed for the years ending in zero or five, is censitary, and encompasses all enterprises resident in Brazil that have a nonresident investor owning part of its equity. For the remaining years, an Annual Census collects data from a subset of these respondents, comprised of large corporations only. Estimates for smaller enterprises that do not participate in the Annual Census are made for the positions, for which there are complementary databases. The estimation process is described in the methodological annexes. For this reason, some direct investment liabilities statistics are presented only for 2010 and 2015.

<sup>1</sup> Please see paragraphs 6.8 to 6.14 of the sixth edition of the IMF Balance of Payments and International Investment Position Manual (BPM6) from the IMF, as well as paragraphs 11 and 12 of the fourth edition of Benchmark Definition of Foreign Direct Investment (BMD4) from the OECD.

<sup>2</sup> Paragraph 4.113 of BPM6 defines residence as the center of predominant economic interest of an entity. The concept of residence should not be confused with the concept of nationality. An economic group of a certain nationality, depending on the localization of its headquarters, may be comprised of enterprises residing in different economies.

The Census collects different dimensions and details regarding direct investment equity. The Electronic Declaratory Registration – Financial Operations Registration Module (RDE-ROF) is the source for compilation of debt instruments positions, and the extensive use of details and information stored in this database is a work in progress. Therefore, statistical analyses of the present report focus on the equity component.

This report is structured as follows: Chapter 1 presents an overview of direct investment liabilities, especially the breakdown of changes in direct investment liabilities positions; Chapter 2 presents the main direct investing countries and direct investment recipient sectors ; Chapter 3 discusses the channeling of direct investment through intermediary or conduit countries, highlighting Chinese direct investment and round-tripping; Chapter 4 presents the characteristics of direct investment enterprises in the country; and the annexes describe the methodologies of: (i) the Census of Foreign Capitals, which us the major source of direct investment liabilities position data; (ii) the RDE-ROF; and (iii) the compilation of direct investment liabilities positions by country of the ultimate controlling parent investor.

## **Overview of Foreign Direct Liabilities**

The direct investment liability position at the end of 2016 reached US\$703 billion (25 percent of Gross Domestic Product-GDP). Taking into account the annual positions from 2010 to 2016, the position peaked in 2012, US\$731 billion (26.2 percent of GDP) and reached the lowest level in 2015, US\$568 billion (23.6 percent of GDP).

Figure 1 depicts the evolution of direct investment liability positions by component: equity and debt instruments. Debt liabilities grew steadily, increasing from US\$95 billion in 2010 to US\$222 billion in 2016. Equity followed a slight upward trend until 2012, declined in the three subsequent years and recovered in 2016.

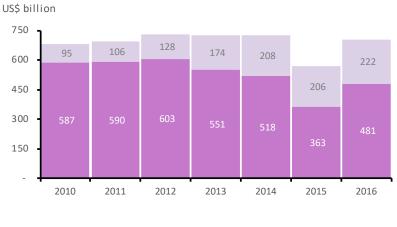


Figure 1 – Evolution of the direct investment liability position



Conceptually, the change in direct investment positions between two periods is due to transactions, exchange rate changes and market price variations, among other variations. In the case of direct investment liabilities, transactions, which are registered in the balance of payments, correspond to the net flows of capital<sup>3</sup> between resident direct investment enterprises and their nonresident direct investors.

Exchange rate changes occur because the balance sheets of direct investment enterprises in Brazil are expressed in domestic currency (Brazilian *reais*). Thus,

<sup>3</sup> Transactions affecting direct investment liabilities do not encompass payments of services, interests and dividends of enterprises recipient of direct investment or their investors. However, the amount of distributed profits not remitted to investors, known as retained earnings, is part of direct investment liabilities flows.

fluctuations in the nominal exchange rate affect the overall value of these enterprises when expressed in US dollars, which is the currency in which Brazil's external sector statistics are disseminated. It is worth noting that the debt instruments component, denominated in foreign currency, is affected by changes in the parity between the currency of denomination and the US dollar.

Market price variations (preferred method for valuation of positions) correspond to changes in the share price of direct investment enterprises, listed in the stock exchange. These enterprises represented 33 percent of the direct investment equity component in 2016.

The other changes component is derived as a residual, comprising reclassifications (for example, of portfolio investments into direct investments, when the voting power threshold of 10 percent is surpassed by subsequent investments from the same investor) and discrepancies among data sources.

The largest changes in direct investment liability positions occurred in 2015 and 2016, as shown in Figure 2. The position decreased US\$156 billion between 2014 and 2015 and increased US\$118 billion between 2015 and 2016.

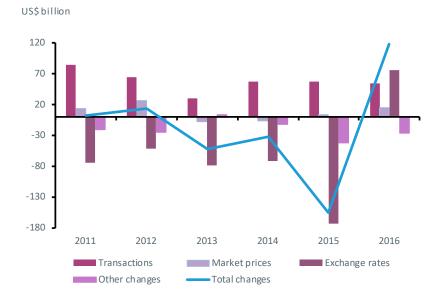


Figure 2 – Breakdown of changes in direct investment liability positions

Transactions contributed to increases in positions during all years under analysis and stabilized at approximately US\$60 billion since 2014.

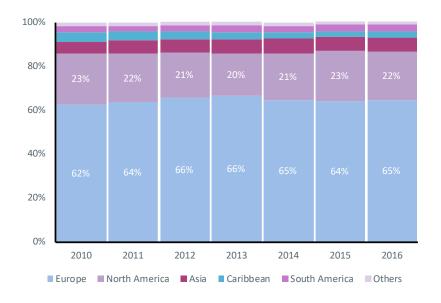
The contribution of exchange rate changes was significant in recent periods. In 2015, due to the 47 percent depreciation of the Brazilian real against the US dollar, the direct investment liability position fell US\$174 billion. However, in 2016, due to a 17 percent appreciation of the Brazilian real, these changes contributed to increase the direct investment liability position by US\$76 billion. Therefore, the volatility of the equity component of Brazil's direct investment liability position is due mostly to those changes.

2

## **Characteristics of Direct Investment** Liabilities

### **Investing regions**

The distribution of direct investment equity investments in Brazil by region recorded on an immediate investing country basis is stable from 2010 to 2016 (Figure 3). Europe is the main investing region, representing about two thirds of the direct investment equity liabilities (thus not considering debt instruments), followed by North America with 22 percent. Asia's share increased in the period, reaching 6 percent in 2016, offset by the reduction in the share of the Caribbean region (from 4 percent in 2010 to 3 percent in 2016).

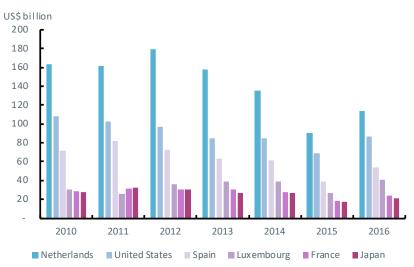


**Figure 3 – Direct investment liability position by investing region** Equity – Immediate investing country

### **Investing countries**

The position of the main direct investing countries in Brazil (also measured by the concept of immediate investing country), equity component, is also stable in the series. The Netherlands are the major investing country, followed by the United States, Spain, Luxembourg, France and Japan, as shown in Figure 4.





The main investing countries in Brazil are from Europe, as shown in Table 1.

#### Table 1 – Direct investment liability Positions in 2016

Equity and Debt Instruments by investing regions - immediate investing country

2016 - US\$ billion	Total Direct Investment Liabilities	%	Equity	%	Debt Instruments	%
Total Position	703		481		222	
Europe	480	68%	311	65%	168	76%
of which						
Netherlands	202	29%	114	24%	87	39%
Luxembourg	60	9%	41	8%	19	9%
Spain	59	8%	54	11%	5	2%
Switzerland	39	6%	17	3%	22	10%
France	28	4%	24	5%	4	2%
United Kingdom	26	4%	18	4%	8	4%
Germany	15	2%	10	2%	5	2%
Belgium	10	1%	5	1%	5	2%
Italy	10	1%	9	2%	1	0%
Austria	9	1%	1	0%	8	4%
North America	133	19%	106	22%	27	12%
of which						
United Sates	106	15%	87	18%	19	9%
Asia	35	5%	30	6%	5	2%
of which						
Japan	24	3%	21	4%	2	1%
Caribbean	29	4%	14	3%	15	7%
of which						
Cayman Islands	11	2%	3	1%	8	4%
British Virgin Islands	8	1%	5	1%	4	2%
South America	21	3%	16	3%	6	3%
of which						
Chile	11	2%	10	2%	1	1%
Others <sup>1/</sup>	6	1%	5	1%	1	0%

 $^{1\prime}$  - Africa, Central America, Pacific Region and positions of less than three enterprises

### **Direct investment enterprise sectors**

Direct investment equity liabilities in the services sector increased during the period under analysis, as shown by Figure 5. Investment shares in agriculture, livestock and mining have decreased significantly, and investment shares in the industrial sector have been on a downward slope since 2014. In 2016, 55 percent of the total direct investment equity liabilities related to services, the largest share in the series.

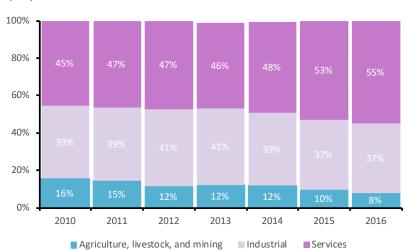


Figure 5 – Evolution of Direct Investment Liability positions by sector Equity

3

## Direct Investment Channeling through Intermediary Countries

The last decades have witnessed the growth of transnational corporations with complex organizational structures and control and influence<sup>4</sup> over several enterprises. Factors such as production organized within global value chains, distinct tax systems and incentives to the establishment of enterprises in several countries have shaped the way by which enterprises allocate their investments.

In this context, there is an increasing number of investment structures in which the relationship between headquarters and affiliates is intermediated by other companies within their economic group, such as financial holdings or special purpose entities (SPE)<sup>5</sup>. These enterprises are generally located in countries offering low taxes and function as financial conduit or pass-through entities for the allocation of direct investment.

As a result, the international methodology has developed two concepts for identifying the country of origin of direct investment: the immediate investing country and the ultimate investor country. The immediate investing country is the country of residence of the enterprise that invests directly in the Brazilian subsidiary or affiliate. The ultimate investor country is the country of residence of the investor who holds the effective control and economic interest over the Brazilian recipient enterprise. Thus, the ultimate investor is identified based on the following analysis: starting from the direct investment recipient enterprise, the chain of ownership is assessed until the nonresident enterprise with no further controller above in the chain is found.

Statistics presented in the previous section followed the basis of immediate investing country, which is the standard basis for the dissemination of bilateral direct investment statistics.

Complementarily, this section also presents statistics related to the ultimate investor country of Brazil's direct investment liabilities.

<sup>4</sup> The international statistical standard defines control as the ownership equal to or greater than 50% of the voting power held by a nonresident investor in the resident direct investment enterprise. Influence is the ownership equal or greater than 10% and lower than 50%.

<sup>5</sup> According to paragraph 4.50 of BPM6, these entities have as typical features the equity by nonresident investors, few or no employees, and little or no physical presence in the country. The definition of SPEs adopted in external sector statistics, including direct investment statistics, is not similar to the commonly used definition for SPEs in Brazil.

# Comparison of immediate investing and ultimate investor regions

Figure 6 reveals that the direct investment liability position– equity held by European investors on an ultimate investor country basis is lower than on an immediate investing country basis. The average of this difference from 2010 to 2016 is approximately 15 percent. This result suggests that there are European countries intermediating direct investment from other regions to Brazil.

Conversely, the direct investment liability – equity for North American investors on an ultimate investor country basis is greater than on an immediate investing country basis, as shown by Figure 7. This difference peaked at 24 percent in 2013 and then decreased to 18 percent in 2016.

Figure 8 shows that, similarly to North America, Asia's values are higher in accordance with the ultimate investor basis. The average percentage of direct investment equity liability on an ultimate investor country basis for this region was nearly 30 percent higher than on an immediate investing country basis from 2010 to 2012. Since 2013, however, this percentage has increased, reaching 60 percent in 2016. This trajectory indicates that Asian investors, including China, have been increasingly channeling their direct investments to Brazil through intermediary countries.

Figure 6 – Direct investment equity liability positions of European countries



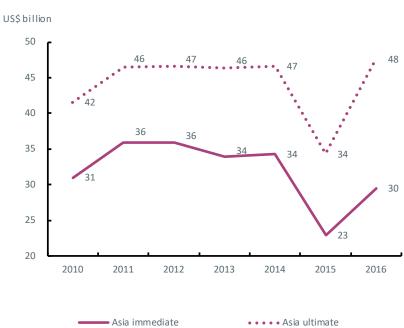
Equity - Immediate investing country and ultimate investor country

Europe immediate
••••• Europe ultimate





Figure 8 – Direct investment liability positions of Asian countries



Equity - Immediate investing and ultimate investor country

# **Comparison of immediate investing and ultimate investor countries**

The comparison of direct investment equity positions shows that some countries in particular hold positions that are significantl larger on an immediate investing country basis than on an ultimate investor country basis. This occurs for the Netherlands and Luxembourg, countries of residence of intermediary enterprises that channel direct investments from ultimate investor countries to countries receiving direct investment.

In 2010, the Netherlands' direct investment equity position in Brazil was US\$163 billion on immediate investing country basis, but only US\$15 billion on an ultimate investor country basis. In 2015, the direct investment equity position on an immediate investing country basis totaled US\$90 billion, while the position on an ultimate investor basis reached US\$13 billion.

Some countries, on the other hand, hold higher direct investment liability positions on an ultimate investor country basis. This is the case of Belgium, United States, China, Italy, United Kingdom, Germany, Switzerland and France, which channel their direct investments to Brazil through intermediary countries.

The direct investment equity liability position vis-à-vis the United States in 2010 was US\$108 billion on an immediate investing country basis and US\$110 billion on an ultimate investor country basis. In 2015, the position was US\$69 billion on an immediate investing country basis and US\$77 billion on an ultimate investor country basis.<sup>6</sup>

		2010			2015								
	Immediate		Ultimate		Immediate		Ultimate						
	investing	%	investor	%	investing	%	investor	%					
US\$ billion	country		country		country		country						
Netherlands	163	28%	15	3%	90	25%	13	4%					
Belgium	4	1%	50	9%	4	1%	40	11%					
Luxembourg	30	5%	13	2%	27	7%	11	3%					
United States	108	18%	110	19%	69	19%	77	21%					
China	1	0%	8	1%	1	0%	9	2%					
Italy	5	1%	18	3%	4	1%	11	3%					
United Kingdom	16	3%	42	7%	16	4%	22	6%					
Germany	14	2%	30	5%	8	2%	12	3%					
Switzerland	10	2%	13	2%	11	3%	15	4%					
France	29	5%	31	5%	18	5%	21	6%					
Bermuda	8	1%	9	2%	3	1%	5	1%					
Chile	7	1%	4	1%	7	2%	5	1%					
Spain	72	12%	85	15%	39	11%	37	10%					

#### Table 2 – Direct investment liability positions – 2010 and 2015

Equity - Immediate investing country and ultimate investor country

<sup>6</sup> The decline of 38% in the total direct investment liability position between 2010 and 2015 was mainly due to the devaluation of the BRL against the USD.

# **Evolution of direct investment position by intermediary countries**

Nearly one third of the direct investment liability position – equity refers to investments channeled through intermediary countries, as shown in Figure 9.

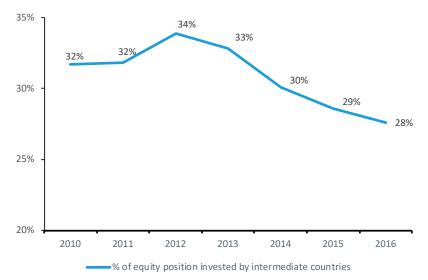
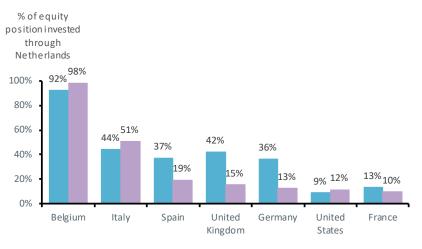


Figure 9 – Percentage of direct investment liability positions channeled through intermediary countries

Figures 10 and 11 show the geographical breakdown of direct investment liabilities– equity channeled through Netherlands and Luxembourg. Among the countries channeling direct investments to Brazil through the Netherlands are Belgium, Italy, Spain, and the United States. In 2015, 98 percent of the direct investment liability position from Belgium, on an ultimate investor basis, were channeled through the Netherlands. Forty-four percent of Italy's direct investment position in Brazil – equity, were channeled through the Netherlands in 2010. These channeled direct investments increased to 51 percent in 2015.



## Figure 10 – Countries channeling direct investment equity to Brazil through the Netherlands – 2010 and 2015

2010 2015

The main countries channeling direct investment equity to Brazil through Luxembourg are China, Canada, United States, Germany, and the United Kingdom, as shown in Figure 11. In 2015, China and Canada registered 66 percent and 25 percent, respectively, of direct investment liability positions – equity channeled through Luxembourg.

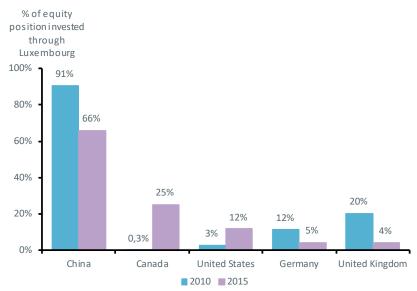


Figure 11 – Countries channeling direct investment equity through Luxembourg – 2010 and 2015

### Box – Round-tripping – Ultimate controller in Brazil

A special application of the compilation of direct investment liability positions on an ultimate investor country basis is the identification of round tripping. Roundtripping refers to the channeling through a third country of an investment by an investor of a country in an enterprise or asset of that same country. Thus, from the Brazilian perspective, round-tripping occurs when an enterprise resident in Brazil (A) channels a direct investment through a controlled enterprise abroad (B) which is the direct investor in another enterprise resident in Brazil (C), as shown in Figure 12.

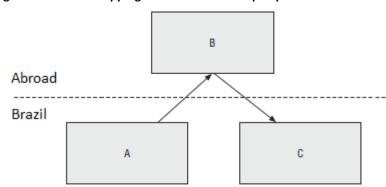
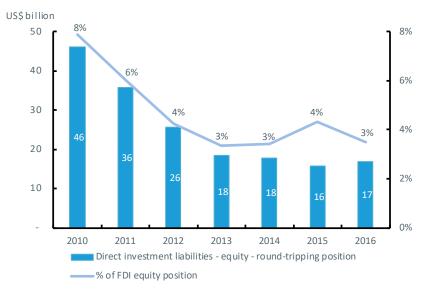


Figure 12 – Round-tripping under the Brazilian perspective

The round-tripping of direct investment may be identified by examining if the ultimate controlling investor of the economic group, which is the ultimate responsible for the direct investment, is resident in Brazil.

In 2010, 8 percent of the direct investment liability position – equity, equivalent to US\$46 billion, was identified as round-tripping. Since then, this percentage has followed a downward trend, reaching 3 percent (US\$17 billion) in 2016, as shown in Figure 13.





Notwithstanding this reduction of the total direct investment equity liability position related to round-tripping as of 2010, the number of direct investment enterprises for which ultimate controllers are resident in Brazil rose from 732 in 2010 to 1506 in 2015. In both positions, these enterprises mainly operated in financial activities and manufacturing of chemical products in the country. Major countries channeling round-tripping investments to Brazil were the United States and the Netherlands.

### **Box – Chinese Direct Investment in Brazil**

In 2016, China's direct investment equity position in Brazil was the 25th largest according to the immediate investing country basis. However, on an ultimate investor country basis it was 13th. This difference reveals that a great deal of Chinese direct investment in Brazil is channeled through intermediary countries instead of being directly invested from China.

Figure 14 shows that practically all Chinese direct investment in Brazil is channeled through enterprises resident in intermediary countries. From 2010 to 2013, the average percentage of direct investment channeled through intermediary countries exceeded 90 percent. Following a reduction to 83 percent in 2014, this percentage started rising again in 2015 and reached 88 percent in 2016.

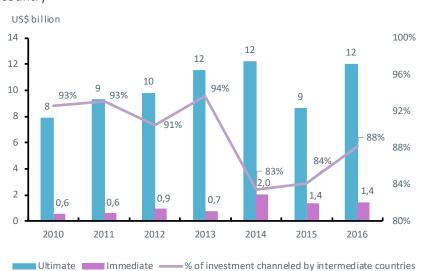


Figure 14 – Chinese direct investment positions

Equity - Comparison between immediate investing country and ultimate investor country

The channeling of Chinese direct investment to Brazil occurs mainly through Luxembourg. In 2010, there were 126 direct investment enterprises for which the ultimate investor country was China. Most enterprises operated in the exploration of oil and gas. In 2015, the number of enterprises rose to 193, mainly in the exploration of oil and gas and the financial services sector.

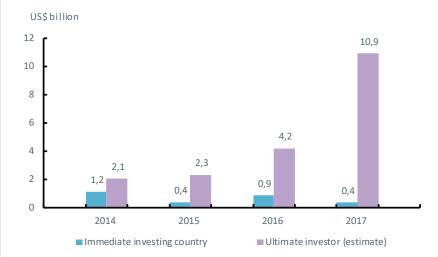
The channeling of Chinese direct investment through intermediary countries to Brazil is also observed in direct investment transactions in the balance of payments. Bilateral statistics related to these flows are published according to the immediate investing country basis, in line with international statistical guidelines.<sup>7</sup> The data source for the compilation of direct investment flows are foreign exchange settlements that identify, in every single operation, the nonresident investor and

<sup>7</sup> See paragraph 49 and 263 of BMD4 and paragraph 4.156 of BPM6. The immediate investing country basis is also adopted in the Coordinated Direct Investment Survey (CDIS) of the International Monetary Fund (IMF), which compiles direct investment assets and liabilities, and included more than 105 countries in 2016. CDIS results are available at <a href="http://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5">http://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5</a>.

the resident direct investment enterprise, accompanied by the amount of inflows into the country. In addition, the foreign exchange settlement records provide information on the country of origin of the foreign exchange transfer, thus allowing the identification of the immediate investing country.<sup>8</sup>

Complementarily, Chinese direct investment transactions according to the ultimate investor country basis were also estimated for 2014 to 2017. Estimates were made by comparing microdata from the Census survey and foreign exchange settlements.<sup>9</sup> The estimate of direct investment flows from China during the period, on an ultimate investor country basis, reached US\$19.5 billion, of which US\$10.9 billion invested in 2017, as shown in Figure 15. According to the immediate investing country basis, investments added up to a significantly lower value in the period: US\$2.9 billion.

#### Figure 15 – Chinese net direct investment liabilities inflows

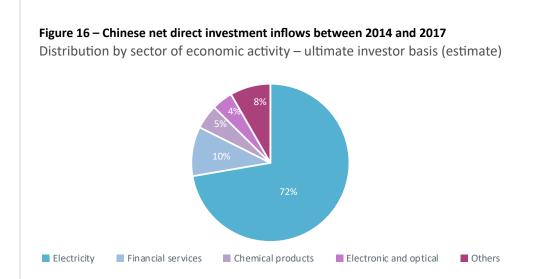


Comparison between immediate investing country and ultimate investor country

Nearly two thirds of the US\$19.5 billion net inflows were in the electricity sector, as shown in Figure 16, followed by lower participations in financial services, chemical products, and electronic and optical.

<sup>8</sup> The country where the financial flow originates is not the same as that of the immediate investor, since the immediate investor can channel its direct investment into Brazil by using bank accounts in third countries.

<sup>9</sup> The National Register of Legal Entities (CNPJ) of each Census respondent indicating China as the ultimate investor country was selected. The CNPJs of other components of the group of enterprises in Brazil were added to this list. This information is also included in the Census. The list of CNPJs was improved by using information related to RDE-IED and assessing the enterprises' names in the specialized press. These assessments did not significantly changed the Census list. For operations above US\$20 million, in those cases in which the enterprise resident in Brazil had ultimate controlling parents from more than one country an individual assessment was made with the purpose of examining if the counterpart abroad was connected to a Chinese economic group.



Statistics and estimates of direct investment transactions represent inflows effectively occurred and registered in foreign exchange settlements rather than announced investment plans, which generally involve investments programmed for several years ahead. Moreover, expenditures carried out by direct investment enterprises resident in Brazil of Chinese investors may be financed by means other than direct investment transactions, such as bank loans from abroad. Gross disbursements of this modality of transaction reached US\$5.5 billion in the period from 2014 and 2017.



## **Characteristics of Direct Investment Enterprises**

This section presents an overview of direct investment enterprises in Brazil and compares them with other domestic enterprises with regard to the generation of jobs and the participation in the foreign trade.

# Distribution of direct investment enterprises by ownership of shares

The number of direct investment enterprises rose by 23 percent between 2010 and 2015, from 13,858 to 16,982.

As previously described, the direct investment relationship requires that at least one nonresident investor own 10 percent or more of the voting power of the resident enterprise. However, foreign investors' ownership of shares of direct investment enterprises usually largely exceeds 10 percent. In practically half of direct investment enterprises in Brazil the voting power of nonresident investors is 100 percent.

Figure 17 shows that, in 2010, voting power in 6,195 direct investment enterprises (45 percent of the total) were entirely owned by nonresident direct investors. In 2015 100 percent of the voting power of 8,500 direct investment enterprises (50 percent of the total) was held by nonresident direct investors, as shown in Figure 18.

In 2010, for 4,850 enterprises (35 percent of the total) the voting power held by nonresident direct investors ranged from 90 percent to 99.99 percent, rising to 5,136 enterprises (30 percent of the total) in 2015.

Considering the voting power between 50.01 percent and 89.99 percent held by nonresident investors, there were 1,336 enterprises (10 percent of the total) in 2010 and 1,601 enterprises (9 percent of the total) in 2015.

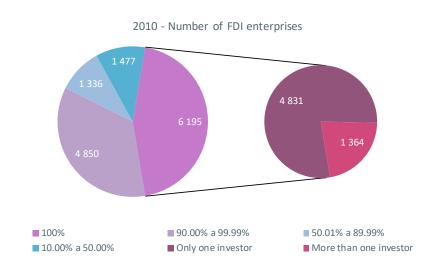
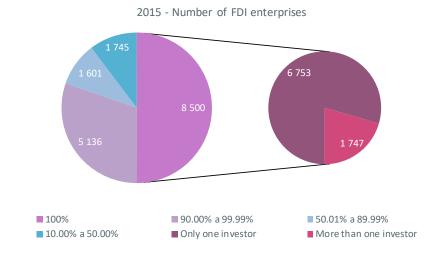


Figure 17 – Nonresident voting power in direct investment enterprises – 2010

Figure 18 – Nonresident voting power in direct investment enterprises – 2015



# Direct investment liabilities distribution by value ranges

The distribution of direct investment liabilities by value ranges reveals capital concentration in large enterprises, as shown in Table 3, a common feature of many direct investment recipient countries. More than half of the direct investment enterprises presented, individually, a direct investment equity liability position of up to US\$1 million. In this range, there were 7,926 enterprises (57 percent of total enterprises), in 2010, and 11,102 enterprises (65 percent of the total) in 2015. Notwithstanding the large number of enterprises in this range, their direct investment equity liabilities was altogether less than 1 percent in 2010 and 2015.

Direct investment enterprises in the range above US\$1 million up to US\$10 million accounted for 24 percent of the number of enterprises and 2 percent of direct investment equity liabilities in 2010, and 21 percent of enterprises and 3 percent of direct investment equity liabilities in 2015.

The group of enterprises with individual direct investment equity liabilities position above US\$100 million accounted for 5 percent of enterprises and 87 percent of direct investment equity liabilities in 2010, and 3 percent of enterprises and 80 percent of direct investment equity liabilities in 2015.

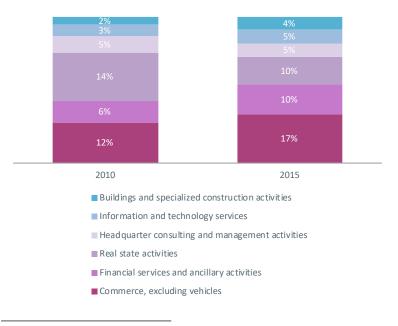
		2010			2015								
	Number of enterprises	%	Direct investment equity liability - US\$ billion	%	Number of enterprises	%	%						
Between 0 and US\$1 million	7926	57%	1	0%	11102	65%	2	0%					
Above US\$1 million to US\$10 million	3326	24%	12	2%	3511	21%	13	3%					
Above US\$10 million to US\$50 million	1572	11%	37	6%	1422	8%	32	9%					
Above US\$50 million to US\$100 million	389	3%	27	5%	385	2%	27	7%					
Above US\$100 million to US\$500 million	472	3%	104	18%	445	3%	98	27%					
Above US\$500 million to US\$1 billion	80	1%	56	10%	72	0%	50	14%					
Above US\$1 billion to US\$10 billion	88	1%	207	35%	43	0%	89	25%					
Above US\$10 billion	5	0%	142	24%	2	0%	52	14%					
	13858		587		16982		363						

#### Table 3 – Direct investment equity liability position by value ranges

# Distribution of enterprises by sector of economic activity

Figure 19 shows the most representative sector of economic activity of direct investment enterprises, highlighting commerce excluding vehicles, which accounted for 16.6 percent of total enterprises in 2015 and 12 percent in 2010.

The number of direct investment enterprises in financial services and ancillary activities and real estate activities was also significant. Unlike most other emerging economies<sup>10</sup>, the distribution of direct investment in Brazil is less concentrated in terms of sectors of economic activity.



## Figure 19 – Distribution of direct investment enterprises by main sectors of economic activity – 2010 and 2015

<sup>10</sup> In Chile, mining and financial services sectors accounted for 58% of liability direct investment positions in 2016 (https://si3.bcentral.cl/estadisticas/Principal1/Estudios/SE/BDP/ied.html). In Mexico, manufacturing industry received 59% of the direct investment flows in 2016 (https://www.gob.mx/cms/uploads/attachment/file/255232/Carpeta\_IED.pdf).

### Location of direct investment enterprises

Business activities of direct investment enterprises may occur in different states of Brazil. A company's head office may be located in a state other than where productive units are located in the case of groups operation in mining, exploration of oil and manufacturing of automotive vehicles, for example. In other cases, the enterprise's operational activity is spread out, especially in sectors such as telecommunications and financial services. Therefore, the geographical breakdown of direct investment equity positions by state was carried out for industrial enterprises only, according to the location of their fixed assets (industrial plants, offices).

In this context, in 2015, the state of São Paulo accounted for 39 percent of direct investment equity liabilities, followed by the states of Rio de Janeiro (13 percent) and Minas Gerais (12 percent). As shown in Figure 20, the South (PR, SC, and RS) accounts for 15 percent of direct investment equity liabilities; the Northeast (BA, SE, AL, PE, PB, RN, CE, PI, and MA), 9 percent; the Midwest GO, MT, and MS and DF), 4 percent; and the North (TO, PA, AP, RR, AM, AC, and RO), 5 percent.

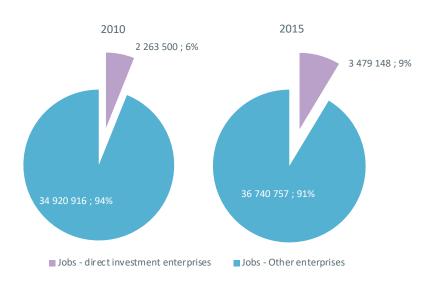
# Figure 20 – Location of direct investment enterprises by fixed assets distribution Industrial enterprises

2015



### **Employment by direct investment enterprises**

The Census survey measured the number of employees in direct investment enterprises while the "Demografia de Empresas – 2015" (Enterprises Demography – 2015) from the Brazilian Institute of Geography and Statistics (IBGE)<sup>11</sup> measured the number of formal jobs in the country. Combined data from both surveys show that direct investment enterprises accounted for nearly 6 percent of the country's formal jobs in 2010, considering the total employed and wage-earning population, growing to 9 percent in 2015, according to Figure 21.



**Figure 21 – Number of formal jobs in direct investment enterprises** Comparison with formal jobs in the country – 2010 and 2015

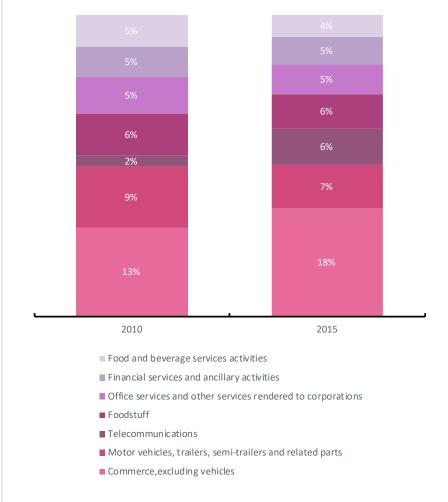
11 Available at https://sidra.ibge.gov.br/pesquisa/demografia-das-empresas/tabelas.

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### **Employment by sector of economic activity**

According to Figure 22, commerce accounted for 17.8 percent of the number of formal jobs of direct investment enterprises in 2015 and 13.1 percent in 2010. The vehicle manufacturing sector was the second largest employer, accounting for7.1 percent of formal jobs in 2015 and 9.1 percent in 2010. Telecommunications direct investment enterprises tripled its participation in the number of jobs among direct investment enterprises, from 1.6 percent to 6.1 percent between 2010 and 2015.

# Figure 22 – Jobs distribution in direct investment enterprises by sector of economic activity

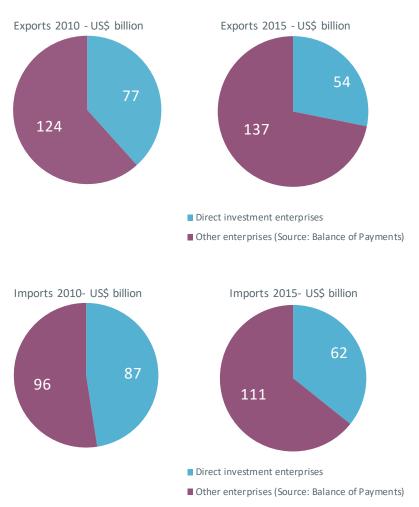


Selected sectors - 2010 and 2015

# Exports and imports of goods by direct investment enterprises

Direct investment enterprises commonly belong to transnational economic groups connected through global value chains. Thus, they can participate in the transnational trade of goods more actively than domestic enterprises with no foreign influence or control. Although representing less than 1 percent of the country's total enterprises, direct investment enterprises accounted for 38 percent of exports in 2010 and 28 percent in 2015; and for 48 percent of imports in 2010 and 36 percent in 2015, as shown in Figure 23.

Figure 23 – Exports and imports of goods by direct investment enterprises



Comparison with country total– 2010 and 2015

# Foreign trade participation by sector of economic activity

Commerce, excluding vehicles, accounted for one third of the volume of international trade carried out by direct investment enterprises in 2015, as shown in Figure 24.

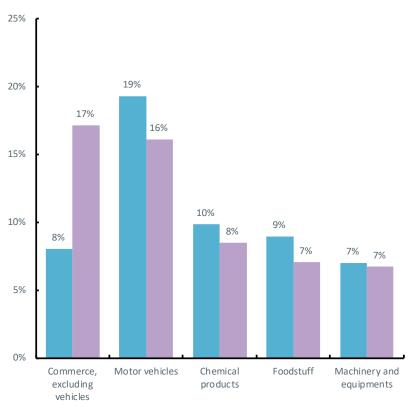


Figure 24 –Foreign trade of direct investment enterprises by sector of economic activity

2010 2015

## Appendix

### Methodological appendix

### **Census of Foreign Capital in Brazil**

The main data source for the compilation of direct investment statistics in this report is the Census of Foreign Capital in Brazil (Census).

The Census is conducted under Law 4,131, dated September 3, 1962 (http://www. planalto.gov.br/Ccivil\_03/leis/L4131.htm). The first edition of the Census was conducted in 1996, collecting data for reference period 1995. Its main objective is to measure direct investment liability position, although information on other types of external liabilities also are reported in the survey.

From 1996 to 2006, Census surveys were conducted every five years, for reference periods 1995, 2000, and 2005. During this period, the following enterprises were required to respond: (i) enterprises receiving external credits; and ii) enterprises receiving foreign direct or indirect investments, with direct or indirect participation of nonresidents in their capital of at least 10 percent of the shares or quotas with voting power, or at least 20 percent in total capital.

As of 2011, the Census became annual, with different criteria for enterprises covered in the survey. The Five-Year Census remains mandatory for all enterprises in which a nonresident investor has capital ownership, while an Annual Census targeting a subset of these respondents covers only large enterprises.

The Five-Year and Annual Censuses were underwnet methodological and operational modifications in 2011, including: i) the introduction of market value as a preferential criterion for measuring the value of the direct investment enterprise, in line with the international methodology for external sector statistics. When the market value cannot be assessed, shareholder equity is the next recommended valuation criterion for the enterprise; ii) the identification of both the immediate investor and the ultimate controlling parent; and iii) consolidation of responses by economic group resident in Brazil, providing rationalization of the survey, lower observance cost, and reduction of the number of respondents.

Currently, the Annual Census must be responded by:

• legal entities resident in Brazil, with direct participation of nonresidents in their capital, in any amount, and with shareholders' equity equal to or greater than the equivalent of US\$100 million, as at December 31 of the reference year;

- investment funds with nonresident shareholders and shareholders' equity equal to or greater than the equivalent of US\$100 million, as at December 31 of the reference year, through its managers; and
- legal entities headquartered in the country, with a total debt balance of short-term trade credits (payable up to 360 days) with nonresidents equal to or greater than the equivalent of US\$10 million as at December 31 of the reference year.

For reference years ending in zero (0) or five (5), the Five-Year Census must be responded by:

- legal entities resident in Brazil, with direct participation of nonresidents in their capital, in any amount, as at December 31 of the reference year;
- investment funds with nonresident shareholders, as at December 31 of the reference year, through its managers; and
- legal entities resident in Brazil, with a total debt balance of short-term trade credits (payable up to 360 days) with nonresidents equal to or greater than the equivalent of US\$1 million, as at December 31 of the reference year.

The number of respondents in the Five-Year Census is significant and growing. In 1995 – the first edition of the survey – there were 6,322 respondents, as shown in Figure 25. In the following edition, in 2000, the number of respondents grew by 80 percent to 11,404. In 2005, with an additional increase of 54 percent the number of respondents reached 17,605.

The reformulation of the survey in 2010 allowed resident enterprises that control economic groups in Brazil to respond to the questionnaire by consolidating information from their resident affiliated enterprises. As a result, the number of respondents declined moderately to 16,844. In 2015, however, a further increase of 16 percent was observed, and the number of respondents totaled 19,537.

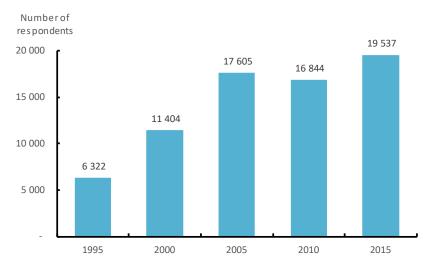


Figure 25 – Evolution of the number of respondents – Five-Year Census

The Annual Censuses – introduced in 2011 – are responded only by large enterprises. Figure 26 shows the number of respondents to the Annual Census. The largest number of respondents was registered in 2011, when 3,210 enterprises answered to the survey. Since then, the number of respondents of the Annual Census has been gradually reducing, reaching 1,863 in 2016.

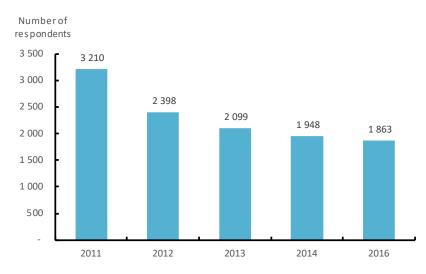


Figure 26 - Evolution of the number of respondents - Annual Census

The reason for the gradual reduction in the number of respondents is that many enterprises participating in the Five-Year Census still answer to the Annual Census, despite not legally required to do so. However, this has become less frequent with respondents' greater awareness of rules regarding the obligation to respond. It is worth noting that enterprises that do not comply with the Census' mandatory reporting or deadlines are subject to legal penalties under the terms of Section IV of Circular 3,857, of the BCB, and of Law 13,506, both of November 14, 2017.

The Annual Census covers approximately 85 percent of direct investment liability positions, despite covering approximately only 13 percent of the total number of respondents of the Five-Year Census. This occurs due to the concentration of investment in the larger enterprises, which are covered by both surveys. Thus, the conduction of the Annual Censuses proves to be quite efficient for the compilation of direct investment liability statistics with representative information and lower observance costs for society.

While the Annual Census collects data on about 85 percent of direct investment liability positions, the remaining 15 percent are sourced from different databases (transactions recorded in foreign exchange settlements, Electronic Declaratory Registration - Foreign Direct Investment Module (RDE-IED) and the Securities and Exchange Commission (CVM), among others), as shown in Table 4. It is worth noting that the direct investment liabilities data obtained through Census surveys undergo a statistical validation processes. Multiple consistency checks are performed, and all discrepancies found are checked with the respondent enterprises and corrected if necessary.

 Table 4 – Direct investment liability positions – Annual Census and complementary databases and estimates

US\$ billion										
	2011	%	2012	%	2013	%	2014	%	2016	%
Direct investment liabilities - equity	590	100%	603	100%	551	100%	518	100%	481	100%
Data collected through surveys	525	89%	523	87%	461	84%	421	82%	401	83%
Complementary databases and estimates	65	11%	80	13%	89	16%	97	18%	80	17%

#### **Electronic Declaratory Registration – Financial Operations Registration**

The direct investment debt liabilities are sourced from the RDE-ROF. This system stores individualized information on financial transactions between resident debtors and nonresident creditors. The resident debtor is responsible for providing the information and completing the records, which covers most debt instruments.

Each register receives an individual identifier code and contains detailed information on the operations, such as: i) type of financial instrument (loan, securities, long-term import financing, among others); ii) principal amount and basic repayment characteristics, such as grace period, periodicity and number of installments; iii) interest payment basic characteristics, such as grace period, periodicity, number of installments and interest rate, iv) repayment schedule; (v) information on the existence of ancillary charges, such as fees and commissions; vi) currency of denomination; and vii) identification of all parties of the transaction and detailed classification of creditors, debtors, and guarantors.

In addition, the RDE-ROF system requires that payments and amendments be made to the original contract, capturing all transactions carried out through foreign exchange settlements or international transfers in Brazilian *reais*. This is done by means of an automatic linkage between systems, in addition to transactions abroad, without payment instruments registered in Brazil, upon the declaration of the person responsible for registration.

The registration in the RDE-ROF is necessary for settlements of foreign exchange contracts related to the transaction, and all information is available immediately to statistics compilers.

# Direct investment liability position compilation – Equity by country of the ultimate controlling parent

The direct investment ultimate controlling parent is an entity which ultimately has control over the decisions regarding the position invested in the resident direct investment enterprise. Therefore, the ultimate controlling parent has control over the immediate investor. Its identification is carried out by assessing the control chain of the immediate investor, and is configured when there is more than 50 percent of the voting power. The assessment of the control chain is performed until an individual or enterprise that is not itself controlled by another enterprise is identified.

If there is no enterprise or individual controlling the immediate investor, this investor is then effectively considered the ultimate investor of the resident recipient enterprise. The country of residence of the ultimate controlling parent is called the ultimate investor country.

The ultimate investor country of the investment position is compiled by reallocating the entire position compiled from the viewpoint of the immediate investor to the ultimate investor. In cases where there is more than one immediate investor in the resident direct investment enterprise the entire investment position, considering each of the immediate investors, is reallocated to the countries of residence of the ultimate controlling parent of each immediate investor<sup>12</sup>.

## **Appendix of Tables**

US\$ million	Agriculture, livestock and mining	Oil and gas extraction	Metallic mineral extraction	Crop, livestock	Mining support service activities	שםוכופרנתונק	beverages	Vehicles	Foodstuff	Chemical products	Metallurgy Services	Financial services	Commerce, excluding vehicles	Electricity and gas	Telecommunications
Total		19.650	5.532	4.672	4.365	46.24	9 22.87	9 19.32	8 17.00	4 15.83	7	105.494	33.957	23.630	21.460
Europe		16.561	3.533	2.331	1.882	43.11	2 12.32	9 14.20	4 13.47	2 12.97	0	57.813	21.584	13.277	15.511
Netherlands		2.833	1.563	912	1.128	42.81	2 1.19	6 6.13	6 6.08	4 4.22	0	19.337	8.672	433	103
Luxembourg		4.704	1.746	290	396	-	43	4 49	1 1.77	5 1.80	3	2.680	1.487	4.494	3.556
Spain		4.883	97	193	39	(c)	54					16.605	669	4.102	11.644
Switzerland		-	-	429	166	(c)	-	3.12			6	5.942	1.067	(c)	83
France		277	60	17	-	7						2.810	5.014	529	1
United Kingdom		476	27	91	53	12					2	5.923	2.443	-	36
Germany		(c)	(c)	120	(c)	(c)	3.01				6	714	626	7	(c)
Belgium		-	-	42	10	-	-	77				60	207	2.697	(c)
Italy		-	(c)	62	3	8			4 16			533	562	31	19
Austria		-	-	10	-		2			7 16		3	204	-	-
North America		2.550	380	1.753	193	2.02						40.525	6.518	1.168	5.347
United States		2.550	177	1.377	162	10						37.614	5.092	1.161	390
Asia		121	188	118	2.195	51						4.466	2.143	719	312
Japan		24	100	50	2.193	51						3.322	1.688	718	(c)
Caribbean		202	490	241	66	1	0 2	4 31			8	1.324	427	4.877	36
Cayman Islands		6	-	31	3	-	-	11		5 -		838	196	835	(c)
British Virgin Islands		144	482	79	60	(c)	2			5 6		376	145	1.814	3
South America		0	114	139	2	58					1	892	3.023	3.274	253
Chile		-	-	0	-	(c)	(c)		3 10			49	2.655	2.340	-
Oceania		208	819	22	20	-	-		5 41	• (-)		145	22	315	-
Central America		0	-	68	-	-	-	1		4 (c)		308	64	-	-
Africa		(c)	(c)	-	7	-	-	-	(c)	-		20	176	(c)	-
(c) confidencial - less than three er	terpri	ses													

#### Direct investment liability - Equity - Selected countries and sectors matrix

<sup>12</sup> Please see paragraphs 608 to 612 of BMD4.

US\$ million	Agriculture, livestock and mining	Metallic mineral extraction	Oil and gas extraction	Manufacturing	Coke, oil derivatives and biofuels	Metallurgy	Foodstuff	Chemical products	Pulp, paper and paper products	Other transportation equipments	Services	Telecommunications	Commerce, excluding vehicles	Financial services	Office services and other corporations services
Total Europe		27.836 20.837	25.894 7.181		50.615 48.818	30.326 11.428	28.929 11.382	22.354 10.258	10.127 4.845	10.573 4.029		30.710 14.841	18.984 6.113	15.337 3.731	10.912 4.288
Netherlands		20.837	4.489		40.010 (C)	905	3.566	4.897	4.645 (c)	3.706		13.102	840	646	4.200
Luxembourg		60	338		805	4.860	2.737	1.125	488	(c)		1.570	421	1.013	2.380
Spain		(c)	-		414	362	789	60	76	120		(c)	247	382	125
Switzerland		(c)	-		(c)	247	784	375	-	(c)		(c)	1.600	14	436
France		-	(c)		19	-	86	234	5	(c)		(c)	365	353	133
United Kingdom		2.753	30		260	1.283	264	683	128	(c)		20	283	548	12
Germany		-	-		-	2.640	16	219	27	16		-	112	9	23
Belgium		-	-		(c)	(c)	350	2.362	(c)	-		-	1.498	15	114
Italy		-	-		-	7	5	30	13	4		2	87	70	4
Austria		-	-		-	886	2.681	12	3.247	(c)		-	118	448	444
North America		1.667	6.232		149	408	748	1.336	24	115		159	3.447	2.440	1.241
United States		1.252	6.225		149	257	701	417	24	115		159	1.394	2.362	1.015
Asia		5	298		-	84	32	48	(c)	422		(c)	421	811	18
Japan			(c)		-	84	30	42	-	190		(c)	115	-	-
Caribbean		5	1.078		-	3.437	2.351	200	1.250	885		2	1.201	1.597	24
Cayman Islands		-	(c)		-	1.585	2.121	(c)	(c)	883		-	406	377	(c)
British Virgin Islands South America		1	(c) 21		-	1.852	(c) 266	21 32	(c) (c)	(c) (c)		1 427	80 150	158 181	20 33
South America Chile		(c)	(c)		-	(c)	200	32	(C) (C)	(0)		427	58	91	33 0
Oceania		- 341	(0)		-	-	2	(c)	(0)	-		420		13	14
Central America		7	- 2		_	-	4	(0)	-	87			12	69	1
Africa		- '			-	-		-	-	-		-	7	8	(c)
(c) confidencial - less than three	e ente	rprises													. ,

Direct investment liability – Debt instruments – Selected countries and sectors matrix

Complete tables available at <u>http://www.bcb.gov.br/Rex/CensoCE/ingl/</u> EDIReportTables2016.xlsx